

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

Claim 1 (original): A structural sandwich plate member comprising : first and second outer metal plates; a core of compact plastics or polymer material bonded to said outer plates with sufficient strength to transfer shear forces therebetween; and a plurality of relatively lightweight forms disposed within said core; wherein said lightweight forms are made of a fire resistant insulating material.

Claim 2 (original): A structural sandwich plate member according to claim 1 wherein each of said lightweight forms comprises a barrier impermeable to the liquid form of said plastics or polymer material between said fire resistant insulating material and said core.

Claim 3 (original): A structural sandwich plate member according to claim 2 wherein said barrier comprises an elongate hollow tube which is filled with said fire resistant insulating material.

Claim 4 (original): A structural sandwich plate member according to claim 2 wherein said barrier comprises a coating which has been applied to blocks of said fire resistant insulating material by spraying or dipping.

Claim 5 (original): A structural sandwich plate member according to claim 2 wherein said barrier comprises a sheet material wrapped around said fire resistant insulating material.

Claim 6 (original): A structural sandwich plate member according to claim 5 wherein said sheet material is selected from the group comprising metal foil, felt, mineral cloth and plastics or polymer sheet materials.

Claim 7 (currently amended): A structural sandwich plate member according to any one of the preceding claims 1 to 6, 2 or 4 wherein said fire resistant insulating material comprises mineral wool.

Claim 8 (currently amended): A structural sandwich plate member according to any one of the preceding claims 1 to 6, 2 or 4 wherein said fire resistant insulating material has a density in the range of from 30 kg/m³ to 200 kg/m³.

Claim 9 (currently amended): A structural sandwich plate member according to any one of the preceding claims 1 to 6, 2 or 4 wherein said fire resistant insulating material has an ignition point and a melting point each greater than 1000°C.

Claim 10 (original): A method of manufacturing a structural sandwich plate member comprising the steps of: providing first and second outer metal plates in a spaced-apart relationship with a plurality of lightweight forms located therebetween; injecting uncured, unfoamed plastics or polymer material to fill the space defined between said outer plates and said lightweight forms; and allowing said plastics or polymer material to cure to bond said outer plates together with sufficient strength to transfer shear forces therebetween; wherein said lightweight forms are made of fire resistant insulating material.

Claim 11 (Previously presented): A structural sandwich plate member according to claim 7 wherein said fire resistant insulating material has a density in the range of from 30 kg/m³ to 200 kg/m³.

Claim 12 (Previously presented): A structural sandwich plate member according to claim 7 wherein said fire resistant insulating material has an ignition point and a melting point each greater than 1000°C.

Claim 13 (Previously presented): A structural sandwich plate member according to claim 8 wherein said fire resistant insulating material has an ignition point and a melting point each greater than 1000°C.